

**REMARKS**

By this response, claim 2 has been canceled; claims 1, 3, 4 and 6-8 have been amended; and new claims 9-18 have been added, leaving claims 1 and 3-18 pending in the application. The specification has been amended to correct minor informalities. No new matter has been added by the amendments. Reconsideration and allowance are respectfully requested in view of the following remarks.

**First Rejection Under 35 U.S.C. § 102**

Claims 1, 3-5, 7 and 8 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,824,205 to Foster for the reasons stated at pages 2-3 of the Office Action.

Claim 1 has been amended to incorporate the features of canceled claim 2. As claim 2 was not rejected under this ground of rejection, claim 1 is patentable over Foster. Dependent claims 3-5, 7 and 8 are thus also patentable over Foster. Therefore, withdrawal of the rejection is respectfully requested.

**Second Rejection Under 35 U.S.C. § 102**

Claims 1-4 and 6-8 stand rejected under 35 U.S.C. § 102(b) over U.S. Patent No. 5,824,205 to Rigney et al. ("Rigney") for the reasons stated at pages 3-5 of the Office Action. The rejection is respectfully traversed.

Claim 1, as amended, recites a method of depositing a MCrAlY-coating on the surface of a single crystal or directionally solidified article. The method comprises the step of coating the article only at a local area with a  $\gamma/\gamma'$  or  $\gamma/\beta$

MCrAlY-coating by an electroplating method. Rigney does not disclose or suggest the claimed method for the following reasons.

Rigney does not disclose or suggest locally coating an article with a  $\gamma/\gamma$  coating or with a  $\gamma/\beta$  MCrAlY-coating. The Office Action cites to column 7, lines 25-30, of Rigney, as allegedly disclosing an article coated with a gamma prime coating. However, Rigney does not disclose applying a gamma prime coating. In contrast, Rigney describes a turbine component preferably made of a nickel-base superalloy, which is "typically of a composition that is strengthened by precipitation of gamma-prime phase" (column 7, lines 29-30). The component is a substrate, not a coating. Rigney describes as preferred alloy compositions for the turbine component, for example, Rene' N5, Rene' N6, CMSX-4, CMSX-10, and PWA 1480 (column 7, lines 43, 51 and 66; and column 8, lines 5 and 12). Rigney does not disclose a  $\gamma/\gamma$  or a  $\gamma/\beta$  MCrAlY-coating. As such, Rigney does not anticipate the method recited in claim 1, which comprises coating an article with a  $\gamma/\gamma$  or  $\gamma/\beta$  MCrAlY coating. Accordingly, claim 1 is patentable over Rigney.

Claims 3, 4 and 6-8, which depend from claim 1, are also patentable over Rigney for at least the same reasons as claim 1. Moreover, these dependent claims recite additional combinations of features that further patentably distinguish the claimed method over Rigney. For example, because Rigney does not disclose or suggest coating an article with any  $\gamma/\gamma$  or  $\gamma/\beta$  MCrAlY coating, Rigney cannot disclose or suggest the method recited in claim 6, which comprises coating different areas of an article with different MCrAlY-coatings. In contrast, Rigney discloses that different locations of a gas turbine component can be coated with different types of protective layers (column 1, line 63 - column 2, line 12), but does not suggest coating

with different MCrAlY ( $\gamma/\gamma$  or a  $\gamma/\beta$ ) coatings. The different types of Rigney's coatings are a first coating (diffusion aluminide or overlay coating) at the platform, a second coating (MCrAlX overlay) on the external surface of the airfoil shape, and a third coating (diffusion aluminide) on the internal surface of the airfoil shape. See, for example, column 1, line 63 to column 3, line 48, of Rigney. Rigney does not suggest the method recited in claim 6.

Therefore, withdrawal of the rejection is respectfully requested.

#### **First Rejection Under 35 U.S.C. § 103**

Claims 2 and 6 stand rejected under 35 U.S.C. § 103(a) over Foster in view of Rigney. The reasons for the rejection are stated on pages 5-7 of the Office Action. Claim 2 has been canceled. The rejection is respectfully traversed.

As discussed above, neither Foster nor Rigney discloses or suggests the method recited in claim 1. Accordingly, claim 6 is also patentable over the applied references for at least the same reasons as claim 1. Therefore, withdrawal of the rejection is respectfully requested.

#### **Second Rejection Under 35 U.S.C. § 103**

Claim 5 stands rejected under 35 U.S.C. § 103(a) over Rigney in view of Foster. The reasons for the rejection are stated on pages 7-8 of the Office Action. The rejection is respectfully traversed.

Because neither Foster nor Rigney discloses or suggests the method recited in claim 1, claim 5 is also patentable over the applied references for at least the

same reasons as claim 1. Therefore, withdrawal of the rejection is respectfully requested.

### **New Claims**

Claims 9 and 10 depend from claim 8, which depends from claim 1. Claims 11 and 12 depend from claim 1. Claims 9-12 are also patentable.

Independent claim 13 recites the features of claim 1 and that "different areas of the article are coated with different  $\gamma/\gamma'$  or  $\gamma/\beta$  MCrAlY-coatings." Claims 14-18 depend from claim 13 and are also patentable.

### **Conclusion**

For the foregoing reasons, allowance of the application is respectfully requested. If there are any questions concerning this response, the Examiner is respectfully requested to contact the undersigned at the number given below.

Respectfully submitted,

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